

## **ABSTRACT**

A trailer mule vehicle with a frame, two independent drive wheels located at the rear of the frame on a common axis, two caster support wheels located at the front of the frame, and a fifth wheel plate generally centered between and positioned above the rear drive wheels. Each drive wheel is powered independently of the other and can rotate at variable speeds in either direction. The vehicle is capable of rotation about the center of the fifth wheel plate. The fifth wheel plate is mounted on an articulated arm which raises and lowers the fifth wheel plate for rapid coupling to and transportation of a semi-trailer without the need for retracting the semi-trailer's landing gear.